

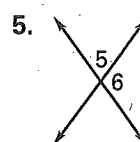
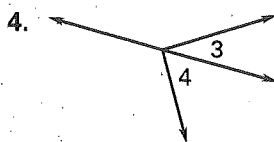
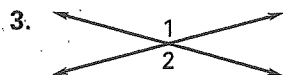
# Practice A

For use with pages 74–81

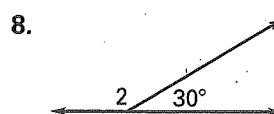
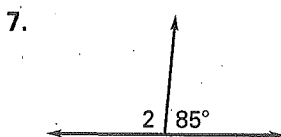
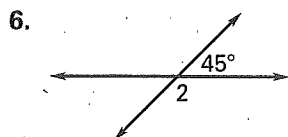
Complete the statement.

1. If two angles form a linear pair, then they are ?.
2. The Vertical Angles Theorem states that vertical angles are ?.

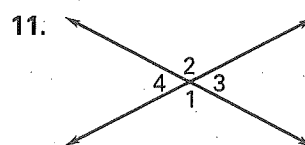
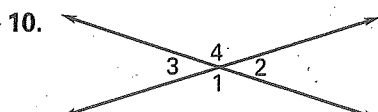
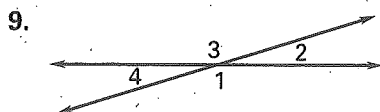
Determine whether the labeled angles are *vertical angles*, a *linear pair*, or *neither*.



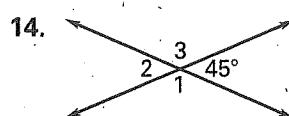
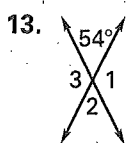
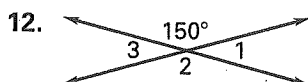
Use the Linear Pair Postulate to find the measure of  $\angle 2$ .



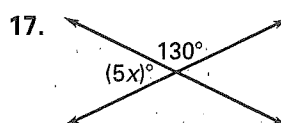
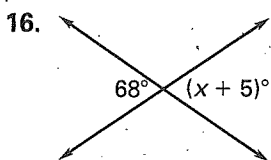
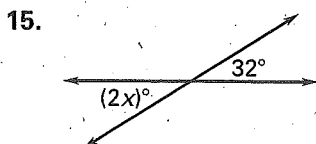
Use the Vertical Angles Theorem to find an angle that is congruent to  $\angle 1$ .



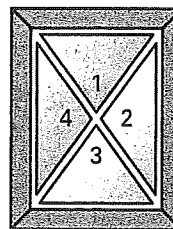
Use the Vertical Angles Theorem and the Linear Pair Postulate to find  $m\angle 1$ ,  $m\angle 2$ , and  $m\angle 3$ .



Find the value of  $x$ .



The window frame shown at the right forms angles 1, 2, 3, and 4. The measure of  $\angle 1$  is  $70^\circ$ .



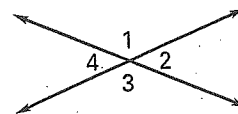
18. Name two pairs of vertical angles.
19. Find  $m\angle 2$ .
20. Find  $m\angle 3$ .
21. Find  $m\angle 4$ .

**Practice B**

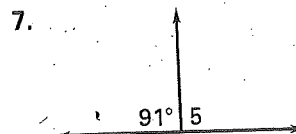
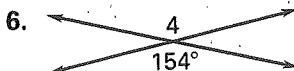
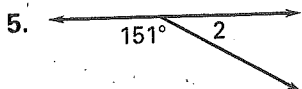
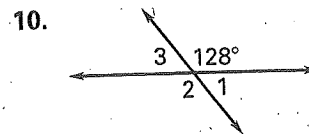
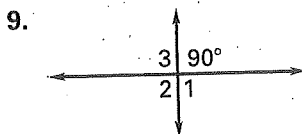
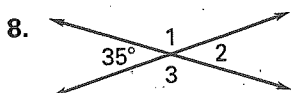
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Use the figure at the right to complete the statement.

1.  $\angle 1$  and  $\underline{\quad ? \quad}$  are a linear pair, and so are  $\angle 1$  and  $\underline{\quad ? \quad}$ .
2.  $\angle 2$  and  $\underline{\quad ? \quad}$  are vertical angles.
3. If  $m\angle 3 = 150^\circ$ , then  $m\angle 2 = \underline{\quad ? \quad}$ .
4.  $\angle 4 \cong \underline{\quad ? \quad}$ .



Find the measure of the numbered angle.

Find  $m\angle 1$ ,  $m\angle 2$ , and  $m\angle 3$ .

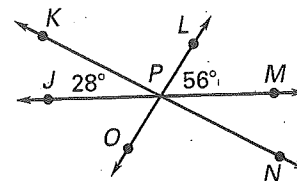
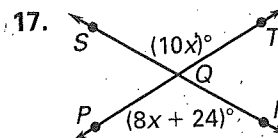
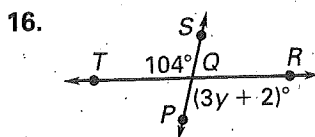
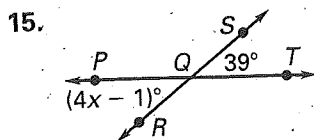
Use the diagram to complete the statement.

11.  $m\angle KPL = \underline{\quad ? \quad}^\circ$

12.  $m\angle LPN = \underline{\quad ? \quad}^\circ$

13.  $m\angle MPN = \underline{\quad ? \quad}^\circ$

14.  $m\angle MPO = \underline{\quad ? \quad}^\circ$

Find the value of the variable. Then use substitution to find  $m\angle PQR$ .

18. The United Kingdom flag can be represented by four intersecting lines that form eight angles. The horizontal and vertical lines are angle bisectors, and the measure of  $\angle 1$  is  $26.6^\circ$ . Find the measures of the remaining angles.

